

C3
Cmice'd.

separated farther from the interference suppressors located on the rear end shield of the motor. In this manner, the sensors 8, 9 are rendered less subject to interference from the suppressors.

In the claims:

C4

1. (Twice Amended) A device for measuring the angle of rotation for an electrical machine equipped with a commutator, a stator and carbon brushes, in which segments of the commutator are formed of an electrically conductive material penetrable by a magnetic field of the commutator, characterized in that a basic body of the commutator bearing the segments is permanently magnetized, at least sectionally, and that the stator of the machine is equipped with sensors responding to the rotary status of the commutator, wherein the sensors lie in the same plane as the carbon brushes.

2. (Twice Amended) The device for measuring the angle of rotation according to Claim 1 characterized in that each sensor has at least one Hall element which is penetrable by the magnetic field of the commutator.

C5

9. A device for measuring the angle of rotation for an electrical machine with a shaft and at least one carbon brush, comprising:
a commutator including electrically conductive segments concentrically arranged around a basic body mounted on the shaft wherein the basic body includes at least one magnetized section; and
a sensor responding to a magnetic field generated upon rotation of the commutator, wherein the sensor is positionable in the same plane as the at least one carbon brush.
